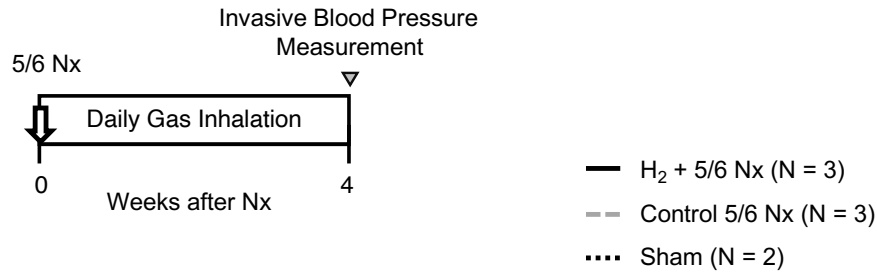
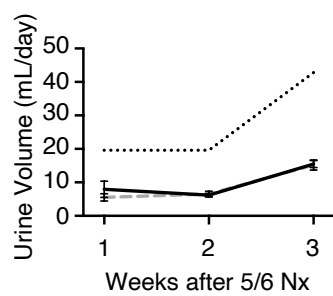
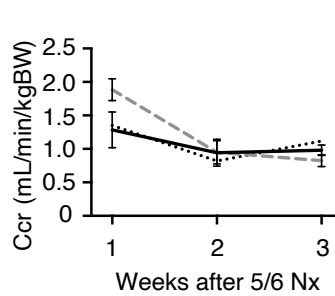
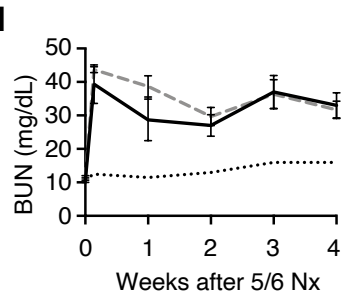
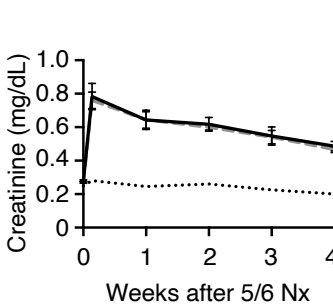
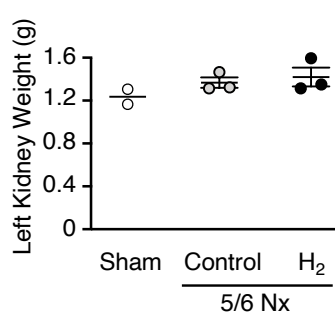
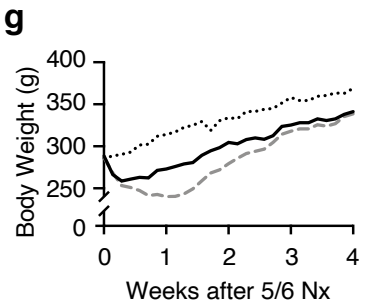
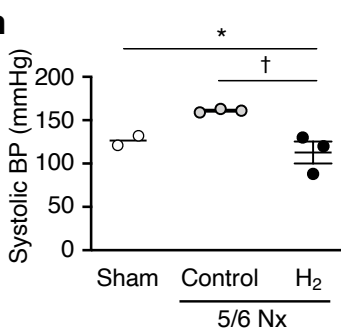
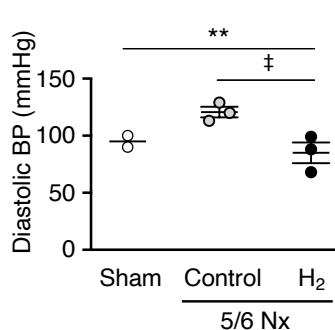
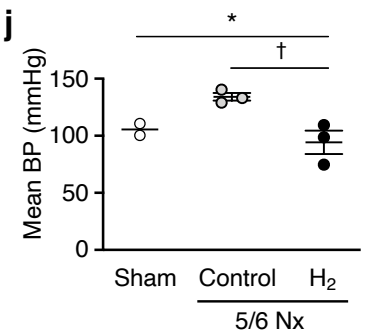


Supplementary materials

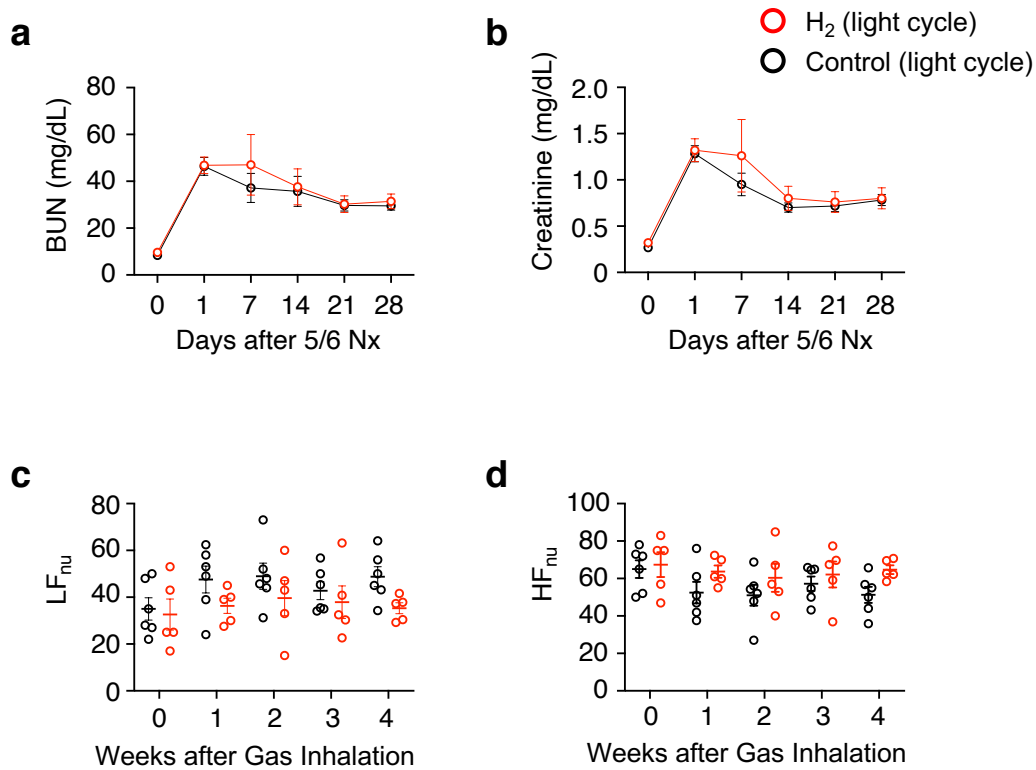
**Daily inhalation of hydrogen gas has a blood pressure–lowering effect in a rat model of hypertension**

Sugai K, Tamura T, Sano M, Uemura S, Fujisawa M, Katsumata Y, Endo J, Yoshizawa J, Homma K, Suzuki M, Kobayashi E, Sasaki J, and Hakamata Y

**a****b****c****d****e****f****g****h****i****j**

**Supplementary Fig. S1. One-hour daily H<sub>2</sub> therapy suppresses blood pressure increase after 5/6 nephrectomy.** a) Experimental protocol for measuring the effect of early administration of H<sub>2</sub> on the blood pressure of 5/6 nephrectomised (5/6 Nx) rats.

The groups measured using this protocol were as follows: control gas-treated sham-operated (Sham) rats, control gas-treated 5/6 Nx (control 5/6 Nx) rats, and H<sub>2</sub>-treated (5/6 Nx + H<sub>2</sub>) rats. Gas inhalation treatment was started immediately after respective surgery (day 0). After 4 weeks, a pressure transducer was placed at the right femoral artery and arterial blood pressure was measured under inhaled anaesthesia. **b)** Change in urine volume, **c)** creatinine clearance (Ccr), **d)** blood urea nitrogen (BUN) level, **e)** creatinine level, **f)** left kidney weight, and **g)** body weight change after Nx. **h)–j)** Comparison of blood pressure (BP) parameters (systolic BP; diastolic BP; and mean arterial pressure [MAP]) 4 weeks after surgery. Data are expressed as the mean  $\pm$  SE. N = 3 in each group. ANOVA; \* P < 0.05, \*\* P < 0.01. Tukey's multiple comparison test; † P < 0.05, ‡ P < 0.01.



### Supplementary Fig. S2. Time course change in renal and autonomic function

**following 5/6 nephrectomy.** Blood pressure and heart rate were recorded at 6 h after the end of gas inhalation treatment. BUN, blood urea nitrogen; HF<sub>nu</sub>, high-frequency power in normalised units; LF<sub>nu</sub>, low-frequency power in normalised units; Nx, nephrectomy. Data are expressed as the mean  $\pm$  SE. N = 5 and N = 6 for H<sub>2</sub> and control group, respectively.